

EXHIBIT 73

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

)
CISCO SYSTEMS, INC.,)
Plaintiff,)
vs.) Case No.:
5:14-cv-05344-BLF (PSG)
ARISTA NETWORKS, INC.,)
)
Defendant.)

ATTORNEYS' EYES ONLY - HIGHLY CONFIDENTIAL
VIDEOTAPED DEPOSITION OF ABHAY ROY
Palo Alto, California
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Volume 1

Reported by:
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1 encounters a shorter version, they can expand it, and if 09:49AM
2 RIP is used further down the document, you can keep 09:49AM
3 saying router information protocol or you can shorthand 09:49AM
4 it, and, typically, at the first documents, you will 09:49AM
5 have both versions, which this is the shorthand for 09:49AM
6 that. 09:49AM

7 Q Are these capitalized letters actually part of 09:49AM
8 the CLI command or are they there for some different 09:49AM
9 reason? 09:49AM

10 MR. NEUKOM: Objection; vague and compound. 09:49AM

11 THE WITNESS: I mean, just looking at this, it's 09:49AM
12 hard to say. There's probably a more detailed document 09:49AM
13 on this command that can probably tell us more. Just by 09:49AM
14 looking at it, it's hard to say what it's trying to say. 09:50AM

15 BY MR. SILBERT: 09:50AM

16 Q You claim to be the person who authored the 09:50AM
17 command "bfd all-interfaces"; correct? 09:50AM

18 MR. NEUKOM: Objection; misstates prior 09:50AM
19 statements and calls for a legal conclusion. 09:50AM

20 THE WITNESS: So bfd all-interfaces is -- is -- 09:50AM
21 looks like a broader implication for various protocols. 09:50AM
22 My involvement has been on OSPF site, and I have written 09:50AM
23 some code on OSPF, which makes use of bfd 09:50AM
24 all-interfaces. 09:50AM

25 Is that what you are asking? 09:50AM

1 BY MR. SILBERT: 09:50AM

2 Q Okay. Well, let me just understand. 09:50AM

3 Did -- is it true that you did not author the 09:50AM

4 command "bfd all-interfaces"? 09:50AM

5 MR. NEUKOM: Objection; calls for a legal 09:50AM

6 conclusion. 09:50AM

7 THE WITNESS: So bfd all-interfaces code I have 09:50AM

8 written for OSPF. 09:50AM

9 BY MR. SILBERT: 09:51AM

10 Q Okay. I'm sorry, did I -- were you finished? 09:51AM

11 A Yes. 09:51AM

12 Q Okay. Did you come up with the phrase 09:51AM

13 "bfd all-interfaces" or did someone else do that? 09:51AM

14 A So this is -- this is quite dated. My best 09:51AM

15 recollection is we actually looked at a variety of IPv6 09:51AM

16 protocols, and we were trying to figure out what could 09:51AM

17 be one of the -- one of the best ways to express this. 09:51AM

18 So this is more of a collaborative effort. I cannot 09:51AM

19 take credit of coming up with it. It's a team of 09:51AM

20 engineers actually who looked into it, how this fits 09:51AM

21 into the bigger -- bigger piece of organization of 09:51AM

22 commands, what makes sense, what is more aesthetically 09:51AM

23 correct in the -- in the correct scope and with the 09:51AM

24 choices we had and the team of engineers, I believe, who 09:51AM

25 came up with this. 09:51AM

1 Q Okay. So if you can't take credit for coming up 09:51AM
2 with the phrase "bfd all-interfaces," who, to your 09:51AM
3 knowledge, on the team of engineers came up with that 09:52AM
4 phrase? 09:52AM

5 MR. NEUKOM: Objection; misstates prior 09:52AM
6 testimony. 09:52AM

7 THE WITNESS: Can't recollect exactly, was it one 09:52AM
8 engineer or was it a bunch of proposals we had and we 09:52AM
9 collectively said this -- this is the best thing to go 09:52AM
10 with. 09:52AM

11 BY MR. SILBERT: 09:52AM

12 Q Okay. So you don't know who came up with the 09:52AM
13 phrase "bfd all-interfaces"? 09:52AM

14 A I can't at this point, yeah. 09:52AM

15 Q Okay. But you do know, I believe you said, that 09:52AM
16 when the team of engineers was working, doing the work 09:52AM
17 that resulted in that phrase, they were consulting 09:52AM
18 protocols or industry standards; correct? 09:52AM

19 MR. NEUKOM: Objection; misstates prior 09:52AM
20 testimony. 09:52AM

21 THE WITNESS: So it's a team of engineers are 09:52AM
22 typically looking at what is the best way to express a 09:52AM
23 certain functionality, right? And they are trying to 09:52AM
24 come up with the best possible command-line interface, 09:52AM
25 and -- and we can get into sort of why and -- and what 09:52AM

1 is the process and so on, right? 09:53AM

2 In Cisco, there is -- there is a team of people 09:53AM

3 who are part of alias called "parser police." What they 09:53AM

4 do is if you want to write a new command, you send them 09:53AM

5 your proposal. They review it. They will tell you that 09:53AM

6 you are not going in the right direction, because they 09:53AM

7 are guiding the overall architecture purity. They are 09:53AM

8 giving you the overall choice on how to sort of design 09:53AM

9 such things. 09:53AM

10 What I was trying to say is the team of engineers 09:53AM

11 write proposals, send it to parser police, for example, 09:53AM

12 for their governance, and what finally gets decided, 09:53AM

13 again, among engineers and the governance party, is what 09:53AM

14 developers implement at the end of the day. 09:53AM

15 (Discussion off the stenographic record.) 09:53AM

16 BY MR. SILBERT: 09:53AM

17 Q Okay. Understanding that you didn't come up with 09:54AM

18 the phrase bfd all-interfaces, you are familiar with 09:54AM

19 that CLI command; correct? 09:54AM

20 A Yes, I am. 09:54AM

21 MR. NEUKOM: Objection; compound. 09:54AM

22 BY MR. SILBERT: 09:54AM

23 Q Would a -- strike that. 09:54AM

24 Is it -- I just want to use the correct 09:54AM

25 terminology. 09:54AM

1 Would you say that it's system administrators who 09:54AM
2 are entering CLI commands? Should we call them "users"? 09:54AM
3 What would make the most sense? 09:54AM
4 MR. NEUKOM: Objection to form. 09:55AM
5 THE WITNESS: I mean, any person who wants to 09:55AM
6 configure a device, so you could choose any language. 09:55AM
7 You could choose a "user." You could choose "operator." 09:55AM
8 MR. SILBERT: Okay. 09:55AM
9 THE WITNESS: You could choose variety of 09:55AM
10 different titles. 09:55AM
11 BY MR. SILBERT: 09:55AM
12 Q Okay. If an operator wanted to enter this 09:55AM
13 command, what would he or she actually type into the 09:55AM
14 interface? 09:55AM
15 A So -- so when you -- 09:55AM
16 MR. NEUKOM: Objection; vague. 09:55AM
17 THE WITNESS: -- when you said "this command," 09:55AM
18 you will have to be a little bit more explicit, right? 09:55AM
19 because the document clearly says this command is 09:55AM
20 applicable for variety of different technologies. 09:55AM
21 So, first, you have to get to which technology 09:55AM
22 are you talking about, and then how do you configure 09:55AM
23 that, and how do you type in the right place. It's 09:55AM
24 quite -- quite a bit to get to the question you are 09:55AM
25 asking, that what will he type. 09:55AM

1 Q Okay. Would you look at the page -- I want to 10:27AM
2 direct your attention to Section 2.10, and it's the page 10:27AM
3 number -- if you look at the bottom-right corner, those 10:27AM
4 little numbers on the bottom that lawyers call "Bates 10:27AM
5 numbers," it ends in 005. 10:28AM

6 A Yes, I see that. 10:28AM

7 Q Do you see where it says Section 2.10 "Content: 10:28AM
8 Command Clarity"? 10:28AM

9 A Yeah, I see that. 10:28AM

10 Q Under that heading, do you see where it says, 10:28AM
11 "Commands should be self-explanatory, so that a 10:28AM
12 relatively knowledgeable user can figure out the command 10:28AM
13 function from the command and on-line help without 10:28AM
14 having to scurry off to the manuals, or worse, consume 10:28AM
15 support resources." 10:28AM

16 Did I read that correctly? 10:28AM

17 A Yes. 10:28AM

18 Q Is that a principle that Cisco applies in naming 10:28AM
19 CLI commands? 10:28AM

20 MR. NEUKOM: Objection; lacks foundation, 10:28AM
21 document speaks for itself, and asked and answered. 10:28AM

22 THE WITNESS: So -- so your question is, again, 10:28AM
23 quite broad, Does Cisco do this? This document -- I 10:29AM
24 don't know the applicability of this to which operating 10:29AM
25 system or what software we are talking about, but if 10:29AM

1 you -- if you -- if you are purely quoting this, the 10:29AM
2 first -- the first line of this document, it does 10:29AM
3 recommend the choice of commands should be 10:29AM
4 self-explanatory. 10:29AM

5 BY MR. SILBERT: 10:29AM

6 Q Is that a principle that you have used in naming 10:29AM
7 CLI commands? 10:29AM

8 MR. NEUKOM: Objection; vague and compound, asked 10:29AM
9 and answered. 10:29AM

10 THE WITNESS: You -- you do want to make smart 10:29AM
11 choices, choices which, as I answered earlier, makes 10:29AM
12 sense from -- from aesthetic perspective, makes sense 10:29AM
13 from the alignment and architectural perspective. 10:29AM

14 Self-explanatory is -- is quite tricky because 10:30AM
15 if -- if I really wanted to be self-explanatory, the 10:30AM
16 command will be quite long, right? So -- so the 10:30AM
17 challenge any developer has is: What is the command you 10:30AM
18 really want to do? And the principles -- which I said 10:30AM
19 earlier, I think those are the varying principles at 10:30AM
20 least I have used. 10:30AM

21 BY MR. SILBERT: 10:30AM

22 Q Okay. Let me direct your attention back to the 10:30AM
23 document, picking up where I left off reading. It says, 10:30AM
24 "What constitutes 'self-explanatory' will vary by your 10:30AM
25 target audience, so be prepared to defend that point to 10:30AM

1 your reviewers. It is entirely possible that a 10:30AM
2 non-expert reviewer may find the command," quote, 10:30AM
3 "forward-peak-cell-rate-clp1," unquote, "offensively 10:30AM
4 complex, but the point can be made that this will be the 10:30AM
5 only acceptable syntax for the ATM community based on 10:30AM
6 the vocabulary and culture of that user group." 10:31AM

7 And I'll stop reading there. 10:31AM

8 Are you familiar with that command that's in 10:31AM
9 quotation marks there? 10:31AM

10 A No, I'm not. 10:31AM

11 Q Okay. Do you have any reason to disagree that 10:31AM
12 the point could be made that that command would be the 10:31AM
13 only acceptable syntax for the ATM community based on 10:31AM
14 the vocabulary and culture of that user group? 10:31AM

15 MR. NEUKOM: Objection; lacks foundation. 10:31AM

16 THE WITNESS: I'm not familiar with what this 10:31AM
17 command is, but purely going by the text, if -- if some 10:31AM
18 developer thought that is the only way to write that 10:31AM
19 command, I think that is what it's trying to capture. 10:31AM

20 BY MR. SILBERT: 10:31AM

21 Q And are you aware of other CLI commands used by 10:31AM
22 Cisco where a developer thought that the command used by 10:31AM
23 Cisco was the only acceptable syntax for the user group 10:31AM
24 based on the vocabulary and culture of the group? 10:32AM

25 MR. NEUKOM: Objection; misstates the witness's 10:32AM

1 prior testimony, lack of foundation, calls for 10:32AM
2 speculation. 10:32AM
3 THE WITNESS: Yes, it's a broad question. I 10:32AM
4 can't -- I can't tell you any command particular. 10:32AM
5 Again, if you have something specific, I can possibly 10:32AM
6 look at some documents and talk. 10:32AM
7 BY MR. SILBERT: 10:32AM
8 Q When you have named CLI commands at Cisco, did 10:32AM
9 you take into account the vocabulary and culture of the 10:32AM
10 user group who would be using the command? 10:32AM
11 MR. NEUKOM: Objection; vague and compound. 10:32AM
12 THE WITNESS: So the way I have designed the -- 10:32AM
13 the commands -- I think I already explained, right? -- 10:32AM
14 you typically look at the content, look at the feature, 10:32AM
15 look at what is being asked, and you start with your 10:32AM
16 best guess. Your best guess, again, may or may not be 10:32AM
17 the best which will eventually have the light of the 10:32AM
18 day, but you go with your knowledge and your judgment. 10:32AM
19 MR. SILBERT: Right. 10:33AM
20 Q And in applying your knowledge and judgment, did 10:33AM
21 you take into account the vocabulary and culture of the 10:33AM
22 user group that would use the command? 10:33AM
23 MR. NEUKOM: Objection; asked and answered, vague 10:33AM
24 and compound. 10:33AM
25 THE WITNESS: So vocabulary and culture of user 10:33AM

1 group requires people to be plugged in with the 10:33AM
2 vocabulary and culture, and a lot of this is really 10:33AM
3 marketing-type people who are more plugged in. 10:33AM

4 Engineers are typically hiding in a cube doing 10:33AM
5 their own stuff. They may not even be as plugged in, so 10:33AM
6 it -- it's hard to put that in what you are designing. 10:33AM

7 The first instinct, including me and other 10:33AM
8 engineers, is you look at what is being asked and you 10:33AM
9 come with command which actually aligns with rest of the 10:33AM
10 things. 10:33AM

11 BY MR. SILBERT: 10:33AM

12 Q So your testimony is that, with respect to the 10:34AM
13 commands that you have named, you have not taken into 10:34AM
14 consideration the vocabulary and culture of the user 10:34AM
15 group that would use the command? 10:34AM

16 MR. NEUKOM: Objection; calls for speculation, 10:34AM
17 vague, compound, and asked and answered. 10:34AM

18 THE WITNESS: So for most of my work, I would say 10:34AM
19 I have relied on -- on the requirements and the 10:34AM
20 documents at hand and not at the culture and the user 10:34AM
21 group. 10:34AM

22 BY MR. SILBERT: 10:34AM

23 Q When you say "the requirements," are you 10:34AM
24 referring to the specifications or protocols relating to 10:34AM
25 that feature? 10:34AM